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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/645,527

08/22/2003

Yoshio Miki

H-1110

8106

24956 7590 09/15/2008
MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.
1800 DIAGONAL ROAD
SUITE 370
ALEXANDRIA, VA 22314

EXAMINER

TANG, KENNETH

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

09/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/645,527	Applicant(s) MIKI ET AL.	
	Examiner KENNETH TANG	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/22/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-7 are presented for examination.

Drawings

2. The drawings are objected to because in Figure 1, item 112, "CALCURATE" should be amended to -- CALCULATE -- in order to correct the spelling error.

3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

4. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. There is a hyperlink on page 1, lines 23-24, of the Specification. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01.

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention:

a. Claim 1

i. The terms "desired" (lines 7 and 16) and "standard" (lines 9 and 17). The terms "desired" (lines 7 and 16) and "standard" (lines 9 and 17) are relative terms which renders the claim indefinite. Said terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

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- ii. The term “the computer system” (on lines 7-8) lacks antecedent basis. It is unclear whether this refers to the distributed computer system or one of the plurality of Computer Service Centers, or one of the plurality of servers, which are all computer systems.
 - iii. The “servers” mentioned on line 11 are indefinite because it is not made clear which whether it refers to the servers of the first Computer Service Center or the second Computer Service Center, or a different Computer Service Center.
 - iv. The limitation “the desired JOB response” in line 16 contains insufficient antecedent basis. It is not clear whether it is intended to refer back to “a desired Job response time” (emphasis added) of claim 7.
 - v. The term “the necessary number” (lines 25-26) is indefinite because it is not made clear which whether it refers to the number of servers of the first Computer Service Center or the second Computer Service Center, or a different Computer Service Center.
- b. Claims 2-5 are also rejected as being dependent upon rejected claim 1.
 - c. Claim 6
 - i. The terms of “the number of servers for achieving a predetermined JOB response time from a predetermined standard JOB request interval, a predetermined standard JOB execution time, and the calculated current average JOB request interval” (page 24, lines 1-5) are all indefinite because it is not made clear which whether these terms refers to the servers of the first Computer Service

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Center or the second Computer Service Center, or a different Computer Service Center.

ii. Similarly, the term “number of the servers” (page 24, line 8) is indefinite because it is not made clear which whether these terms refers to the servers of the first Computer Service Center or the second Computer Service Center, or a different Computer Service Center.

b. Claim 7 is also rejected as being dependent upon rejected claim 6.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokusho et al. (hereinafter Kokusho) (US 2005/0193113 A1).

2. As to claim 1, Kokusho teaches a JOB distributing method in a distributed computer system where a plurality of Computer Service Centers (Server Group 7-1, 7-2, 7-3 at Fig. 1) each having a plurality of servers (Each Server Group has plurality of servers 10 at Fig. 1) are connected via a network (Network 2 or LAN Network 6), comprising the steps of:

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predetermining a desired JOB response time at the computer system, a criterion of the number of servers operating at a first Computer Service Center, a standard JOB request interval at the first Computer Service Center, and a standard JOB execution time of the servers (fixed standard response time is achieved, etc.) (page 1, [0001], [0007]);

calculating a current average JOB request interval when a JOB request occurs at the first Computer Service Center (lines 1-8 of [0010], [0011], see claim 1);

calculating the necessary number of servers required for achieving the desired JOB response by inputting the standard JOB request interval, the standard JOB execution time, and the calculated current average JOB request interval (the number of servers is adjusted/load balanced to achieve the fixed standards and service levels) (page 1, [0001], [0004], [0009], [0010]); and

executing a JOB of the JOB request in the servers of the first Computer Service Center, and transmitting the JOB request from the first Computer Service Center to a second Computer Service Center.

3. Kokusho is silent in checking/comparing whether the necessary number of servers is within the criterion of the number of servers (total number of servers available) at the first Computer Service Center before executing the job. However, one of ordinary skill in the art would know that checking the number of servers in this way would be vital. For example, if the system calculated that 4 servers were required in order to achieve the desired JOB response time, but the First Computer Service Center only contained 3 servers, it would not be able perform the execution in the First Computer Service Center to achieve the desired JOB response time.

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Therefore, it would have been obvious to one of ordinary skill in the art to modify Kokusho such that it would include the feature of comparing/checking whether the necessary number of servers of the first Computer Service Center is within the number of total servers available in the first Computer Service Center to obtain the invention of claim 1.

4. As to claim 2, Kokusho teaches wherein the current average JOB request interval is an average interval of JOB requests observed during a predetermined period until a current time (page 1, [0011]).

5. As to claim 4, it is rejected for the same reasons as stated in the rejection of claim 1. Kokusho's system is done automatically and dynamically load balancing and the structure of Kokusho's system is able to perform this load balancing more than once (page 1, [0001]) using the same Resource Allocation Controller 5 and Load Sharing Device 4 (see Fig. 1).

6. As to claim 5, Kokusho is silent in explicitly teaching wherein values of the standard JOB request interval in the second Computer Service Center and the standard JOB execution time of the servers at the second Computer Service Center are the same as the standard JOB request interval in the first Computer Service Center and the standard JOB execution time of servers at the first Computer Service Center. However, Kokusho does teach that both first and second Computer Service Centers desire to achieve a fixed, standard, and common goal (page 1, [003],

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[004]). Therefore, it would have been obvious for one of ordinary skill in the art to maintain equal standard parameter values between the first Computer Service Center and the second Computer service Center so that they are consistent with each other, which would allow for the predicted result of an achievement of the common fixed standard/goal.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kokusho et al. (hereinafter Kokusho) (US 2005/0193113 A1) in view of Freeman et al. (hereinafter Freeman) (US 6,922,724 B1).

8. As to claim 3, Kokusho is silent in teaching wherein the second Computer Service Center authenticates a user by whom the JOB request occurs, and charges the user for a JOB execution time of the JOB request. However, Freeman teaches managing and balancing a server load and also provides user authentication, such as a user ID/password, between the elements of the system and a successful transaction occurring only upon accesses granted by the account authority (col. 59, lines 30-46, col. 16, lines 1-12). Kokusho and Freeman are analogous art because they are both in the same field of endeavor and/or solving the same problem of load balancing. One of ordinary skill in the art would have known to modify Kokusho such that it would include user authentication, as taught in the load balancing system of Freeman. The suggestion/motivation for doing so would have been to provide the predicted result of improving security/protection by providing trust and authentication credentials (col. 59, lines 30-46, col. 16, lines 1-12).

9. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kokusho et al. (hereinafter Kokusho) (US 2005/0193113 A1) in view of Circenis et al. (hereinafter Circenis) (US 7,143,411 B2).

10. As to claim 6, it is rejected for similar reasons as shown in the mapping of the rejection of claim 1. However, Kokusho is silent in charging the first Computer Service Center by calculating a fee of the substitutive execution within a predetermined period of the second Computer Service Center. Circenis teaches a multiprocessing system over a network that monitors processor utilization in the system, where the processor utilization may be defined as the amount of processor resources or processor time consumed by processes executing on a processor (col. 1, lines 33-45 and 56-57, col. 2, lines 17-21). Furthermore, accurate billing of fees for CPU utilization can be accomplished (col. 2, line 9, lines 53-67 through col. 3, lines 1-6). One of ordinary skill in the art would have known to modify Kokusho's multi-processing system such that it would include the features of Circenis because it would provide the predicted result of being able to implement an accurate billing system to charge customers based on their usage (col. 1, lines 50-55, col. 2, line 9 and 64-67). Therefore, it would have been obvious to one of ordinary skill in the art to combine Kokusho and Circenis to obtain the invention of claim 6.

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11. As to claim 7, Circenis teaches wherein the second Computer Service Center calculates a ratio of the substitutive execution time to the total server usage time (percentage is a ratio) within the predetermined period, and the second Computer Service Center is charged for the purchase fee of the servers when the ratio is over a predetermined criterion (col. 1, lines 33-45 and 56-57, col. 2, lines 17-21 and 53-67 through col. 3, lines 1-6).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- **Eilert et al. (US 5,675,739)** discloses a distribute data load balancing multi-processing system that adjusts a plurality of work units such that it achieves a predetermined response time performance goal (see Abstract, col. 1, lines 16-17 and 32-35, col. 2, lines 2-17).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KENNETH TANG whose telephone number is (571)272-3772. The examiner can normally be reached on 8:30AM - 6:00PM, Every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

/Kenneth Tang/
Examiner, Art Unit 2195